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10/549,830	09/20/2005	Erna Kastl	03/039K	1410
7590	04/14/2009		EXAMINER	
Klaus Schweitzer ProPat 425-C South Sharon Amity Road Charlotte, NC 28211			KASHNIKOW, ERIK	
			ART UNIT	PAPER NUMBER
			1794	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/549,830	<b>Applicant(s)</b> KASTL, ERNA
	<b>Examiner</b> ERIK KASHNIKOW	<b>Art Unit</b> 1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 12 February 2009.  
 2a) This action is FINAL.      2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,2 and 4-24 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1,2 and 4-24 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO-146/08)  
 Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/12/09 has been entered.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 7-9, 11-16, 18, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorenzo Moore et al. (US 5,741,533) in view of Yazaki et al. (US 5,094,847).

4. In regards to claims 1 and 13 Lorenzo Moore et al. teach films suitable for food packaging (column 1 lines 5-10). Lorenzo Moore et al. further teach that the layers for the food package may comprise polyamides and/or polyolefins (column 3 lines 24-45).

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Lorenzo Moore et al. teach that the films may comprise an antimicrobial agent (column 7 lines 46-57).

5. In regards to claims 9 and 14 Lorenzo Moore et al. teach that the food package comprises two layers, which would necessitate that the antimicrobial containing layer is an outer layer (claim 1).

6. In regards to claim 18 Lorenzo Moore et al. teach that the first layer has a thickness of 1.5 mils (column 8 lines 55-59) and that the second layer has a thickness of 1.0-4.8 mils (column 9 lines 1-4). This leaves a total film thickness of 2.5-6.3 mils or 63.5-160.2  $\mu\text{m}$ , which overlaps with Applicant's range.

7. While Lorenzo Moore et al. teach polyamide food casings with an antimicrobial additive as stated above, they are silent regarding the specific antimicrobial additives, the lack of or presence of biaxial stretching of the entire film, as well as symmetrical and asymmetrical structure of the film.

8. Yazaki et al. teach antimicrobial packaging for food products (column 1 lines 10-15).

9. In regards to claims 1 and 2 Yazaki et al. teach food packaging films with an antibacterial molded article of a polyolefin resin (column 1 lines 10-14). Yazaki et al. teach that the antimicrobial agent can be silver salts of carboxylic acid (column 3 line 9). Examiner points out that Yazaki et al. teach in their specification that the corona discharge could be used to increase antimicrobial activity (column 2 lines 44-50), and is not required. This means that the corona discharge is not imparting any new antimicrobial properties, but is instead increasing the properties already presented by

the antimicrobial agent already present. Examiner points out that by using the phrase "could be increased" Yazaki et al. is demonstrating that the products already have antimicrobial activity. It is pointed out that a surface treated by only a corona discharge would not have any antimicrobial properties and therefore it is the presence of the silver salt of the carboxylic acid alone that causes the antimicrobial properties. In regards to the comparative examples in Yazaki et al. Examiner points out that only the silver zeolite composition is shown to not have antimicrobial activity prior to being treated by the corona discharge. There is no mention in Yazaki et al. of the silver salt of a carboxylic acid not having antimicrobial activity prior to the corona discharge treatment. In fact it is Examiners assertion that since the article of Yazaki and the presently claimed invention are made of the same materials, and at the same concentrations then they would inherently have the same properties, including the bacteriostatic activity. Examiner points out that Applicants state that a specific antimicrobial activity desired is antibacterial activity, and as such recognize that an antibacterial additive is an antimicrobial additive (paragraph 0007 of instant specification).

10. In regards to claims 7 and 8 Yazaki et al. teach that the antibacterial agent is present in concentrations of 0.05-2.0% by weight (column 4 line 25).

11. In regards to claims 11 and 12 Yazaki et al. teach an embodiment wherein the films are not stretched (column 5 lines 37-56) and an embodiment wherein the films undergo biaxial stretching column 8 lines 16-32).

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12. The embodiments in claims 15 and 16 that the films would be symmetrical or asymmetrical are design choices that affect the layout of the film but not the properties, and are therefore obvious to one of ordinary skill in the art at the time of the invention.

13. In regards to claim 23, while Yazaki et al. teach that the corona treatment is used to increase antimicrobial activity Examiner points out that Yazaki et al. teach in their specification that the "corona discharge could be used to increase antimicrobial activity" (column 2 lines 44-50), and is not required. Examiner points out that by using the phrase "could be increased" Yazaki et al. is demonstrating that the products already have antimicrobial activity. In regards to the comparative examples in Yazaki et al. Examiner points out that only the silver zeolite composition is shown to not have antimicrobial activity prior to being treated by the corona discharge. There is no mention in Yazaki et al. of the silver salt of a carboxylic acid not having antimicrobial activity prior to the corona discharge treatment. In fact it is Examiners assertion that since the article of Yazaki and the presently claimed invention are made of the same materials, and at the same concentrations then they would inherently have the same properties, including the bacteriostatic activity.

14. In regards to claim 24 Yazaki et al. teach an antimicrobial agent concentration of 0.05-2.0 weight % (column 4 lines 25).

15. One of ordinary skill in the art at the time of the invention would be motivated to modify the invention of Lorenzo Moore et al. with that of Yazaki et al. because the invention of Yazaki et al. offers the ability to lower the content of antimicrobial additives

which are generally expensive and accordingly economic effects are increased (column 2 lines 50-53).

16. Claims 4-6, 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lorenzo Moore et al. (US 5,741,533) in view of Yazaki et al. (US 5,094,847) and Schroder et al. (US 6,517,920).

17. While Lorenzo Moore et al. and Yazaki et al. teach a multilayer film for packaging a food product, they are silent regarding specific copolyamide and polyamide layers as well as tubular formations.

18. Schroder et al. teach biaxially stretched casing for wrapping food products (column 1 lines 15-18).

19. In regards to claims 4 Schroder et al. teach that at least one layer of their invention comprises the aliphatic polyamide 6/66 (column 5 lines 1-2).

20. In regards to claim 5 Schroder et al. teach that an aromatic copolyamide can also be used in that layer, specifically mentioning polyamide 6I/6T (column 5 lines 37-42).

21. In regards to claim 6 Schroder et al. that polyamide 6I/6T is added in amounts of 2-40% (column 5 line 42).

22. In regards to claim 10 Schroder et al. teach that the casing can be tubular in shape (column 6 line 39-53).

23. In regards to claim 19 Schroder et al. teach that the tube has a diameter in the range of 10-400 mm (column 7 line 30).

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24. One of ordinary skill in the art at the time of the invention would be motivated to modify the casing of Lorenzo Moore et al. and Yazaki et al. with the casing of Schroder et al. because the film of Yazaki et al. which have good appearance transparency and surface properties (column 2 lines 40-43) would benefit from the good barrier properties and adhesion to the contents as offered by Schroder et al. (Column 1 lines 33-35). One would also be motivated to make the packaging of Yazaki et al tubular so that it could completely cover various foods that are tubular in shape and for which it can be used to package.

25. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lorenzo Moore et al. (US 5,741,533) in view of Yazaki et al. (US 5,094,847) as applied to claim 1 above and in further view of Towne et al. (US 4,635,316).

26. As stated above Yazaki et al. and Lorenzo Moore et al. teach tubular casings used for packaging food products but are silent regarding presoaked ready to fill embodiments.

27. Towne et al. teach films used to package food products (column 1 lines 8-10).

28. Towne et al. teach that the casings can be premoisturized and be "ready to stuff" (column 3 lines 40-47).

29. One of ordinary skill in the art at the time of the invention would be motivated to modify the casings of Yazaki et al. and Lorenzo Moore et al. with that of Towne et al. because the casings of Yazaki et al. and Lorenzo Moore et al. would benefit from the machinable properties of Towne et al., specifically eliminating the step of soaking the

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casing films before the food product is added, which would save time and money  
(column 3 lines 40-47).

30. Claims 20-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Lorenzo Moore et al. (US 5,741,533) in view of Yazaki et al. (US 5,094,847) and Iwao et al. (JP 09-057923).

31. As stated above Lorenzo Moore et al. and Yazaki et al. teach an antimicrobial film formed from metal salts however they are silent with regards to concentrations in a master batch.

32. In regards to claim 20 Lorenzo Moore et al. teach that coextrusion is a preferred method of forming the film (column 7 lines 23-26). In regards to claims 20-21 Yazaki et al teach a method of forming the film which involves adding the metal antimicrobial salt or zeolite to the polyethylene mixture, and then extruding the mixture (column 5 lines 36-56). However Yazaki et al. are silent regarding concentrations between 5-40%.

33. Iwao et al. teach antimicrobial thermoplastic extruded film (paragraph 0001).

34. Iwao et al. teach that the antimicrobial agent can be silver inorganic compounds, and while they do not specifically mention silver salts they do mention silver zeolites (paragraph 0010) which are interchangeable with silver salts in the invention of Yazaki et al. Iwao et al. teach that the inorganic silver compounds be mixed in with the thermoplastic polymer in concentrations between 2-10% by weight (paragraph 0009 the examples).

35. One of ordinary skill in the art at the time of the invention would be motivated to modify the films of Lorenzo Moore et al. and Yazaki et al. with those of Iwao et al because the film of Lorenzo Moore et al. and Yazaki et al. would benefit from the teaching of Iwao et al. which teaches that a specific amount of salt such that the salt imparts antibacterial effect without weakening the film (paragraph 0009).

***Response to Arguments***

36. Applicant's arguments, see arguments, filed 02/12/09, with respect to the objection of the abstract and the 35 U.S.C. 112 1st paragraph rejection have been fully considered and are persuasive. The rejection of claim the claims under 35 U.S.C. 112 1st paragraph have been withdrawn.

37. In regards to applicants arguments concerning the corona discharge Examiner points out that Yazaki et al. teach in their specification that the corona discharge could be used to increase antimicrobial activity (column 2 lines 44-50), and is not required. This means that the corona discharge is not imparting any new antimicrobial properties, but is instead increasing the properties already presented by the antimicrobial agent already present. Examiner points out that by using the phrase "could be increased" Yazaki et al. is demonstrating that the products already have antimicrobial activity. It is pointed out that a surface treated by only a corona discharge would not have any antimicrobial properties and therefore it is the presence of the silver salt of the carboxylic acid alone that causes the antimicrobial properties. In regards to the comparative examples in Yazaki et al. Examiner points out that only the silver zeolite

composition is shown to not have antimicrobial activity prior to being treated by the corona discharge. Examiner points out that the courts have ruled that "applicant must look to the whole reference for what it teaches. Applicant cannot merely rely on the examples and argue that the reference did not teach others." *In re Courtright*, 377 F.2d 647, 153 USPQ 735,739 (CCPA 1967). There is no mention in Yazaki et al. of the silver salt of a carboxylic acid not having antimicrobial activity prior to the corona discharge treatment. In fact it is Examiners assertion that since the article of Yazaki and the presently claimed invention are made of the same materials, and at the same concentrations then they would inherently have the same properties, including the bacteriostatic activity. In regards to the assertion that the metal ions need the corona discharge treatment to become activated Examiner points out that all comparative examples of Yazaki et al. utilize the metal zeolite, and not silver salts of carboxylic acid, and therefore Yazaki et al. does not show that the silver salts of the carboxylic acid do not have antimicrobial properties without the corona treatment. As the invention of Yazaki et al and Schroder et al. contain the same materials as and at concentration ranges with overlap with applicant's, it would intrinsically have antimicrobial properties without the corona discharge treatment. Examiner also points out that "[T]he PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product. Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same" The burden of proof is similar to that required with respect to product-by-process claims. *In re Fitzgerald*,

619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

38. In regards to Applicant's arguments that Yazaki et al. do not teach Applicant's amended ranges, Examiner points to column 4 line 25.

39. In response to Applicant's arguments regarding the Examiners use of the term "same material", Examiner points out that the 103 rejection incorporates all aspects of Applicant's invention including the given concentrations, and therefore the casing would intrinsically have all the same chemical, mechanical, and physical properties.

40. In response to applicant's argument that Schroder et al. Towne et al., and Iwao et al. is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, applicant's endeavor is the packaging of food products, which all of Schroder et al. Towne et al., and Iwao et al. deal with. As such they are analogous art.

41. Examiner also points out that while Schroder et al. Towne et al., and Iwao et al. do not disclose all the features of the present claimed invention, they are used as teaching references, and therefore, it is not necessary for these secondary references to contain all the features of the presently claimed invention, *In re Nievelt*, 482 F.2d 965, 179 USPQ 224, 226 (CCPA 1973), *In re Keller* 624 F.2d 413, 208 USPQ 871, 881 (CCPA 1981). Rather these references each teach a certain concept, and in

combination with the primary reference, disclose the presently claimed invention. If the secondary reference contained all the features of the present claimed invention, it would be identical to the present claimed invention, and there would be no need for secondary references.

42. In regards to Applicant's arguments that the masterbatches of Iwao et al. should not exceed 10%, Examiner points out that the .005-2% of Yazaki et al. is under 10%.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIK KASHNIKOW whose telephone number is (571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (Second Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner  
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